



DENALI COMMISSION

Alaska Coastal Management Program
May 5, 2011

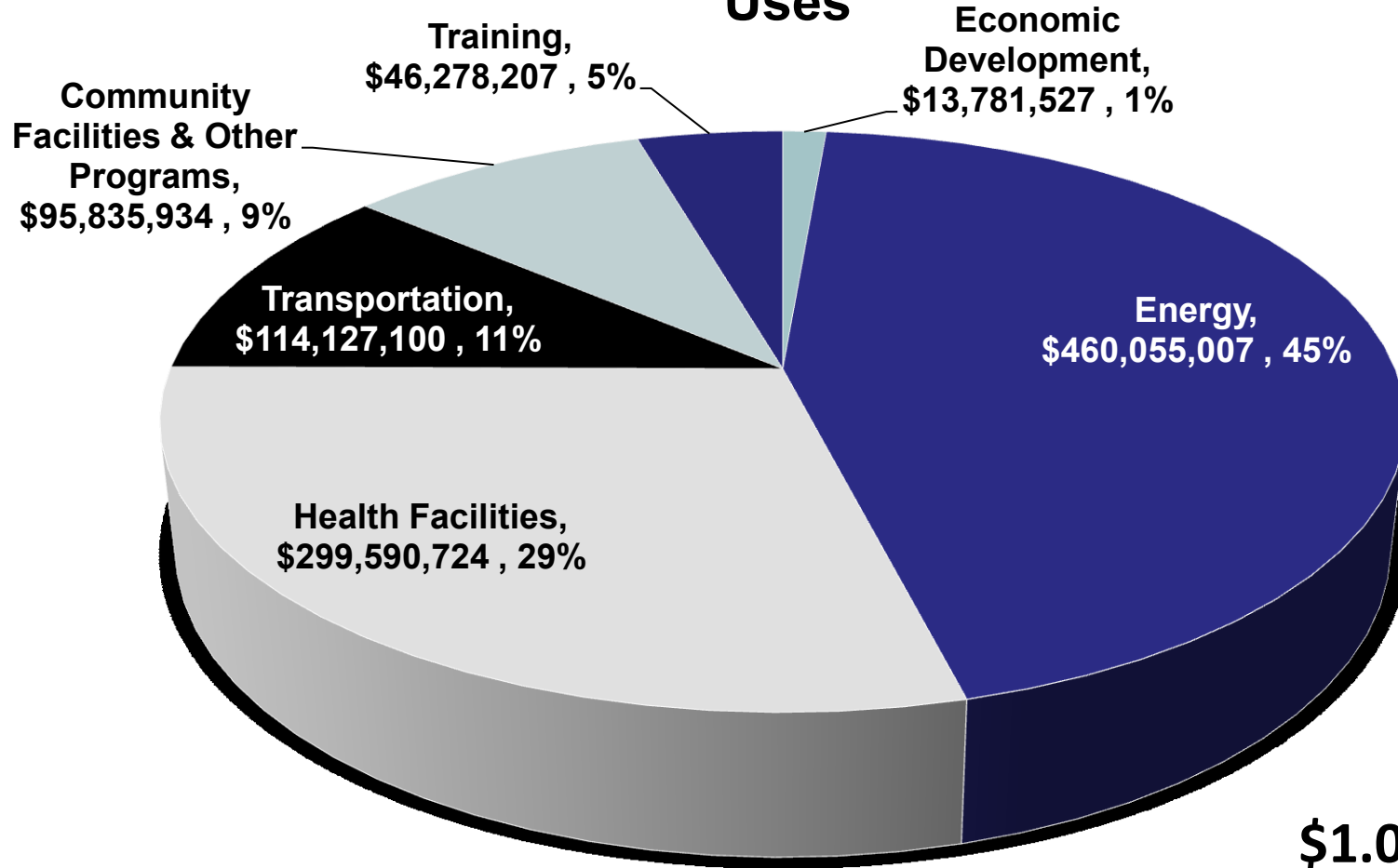


The Denali Commission is an independent federal agency, created in 1998 to provide critical infrastructure improvements in rural Alaska

Programs

- Energy Program
- Health Facilities Program
- Transportation Program
- Training Program

FY99 - FY10 Denali Commission Program Funding Uses





Bulk Fuel Storage Facilities

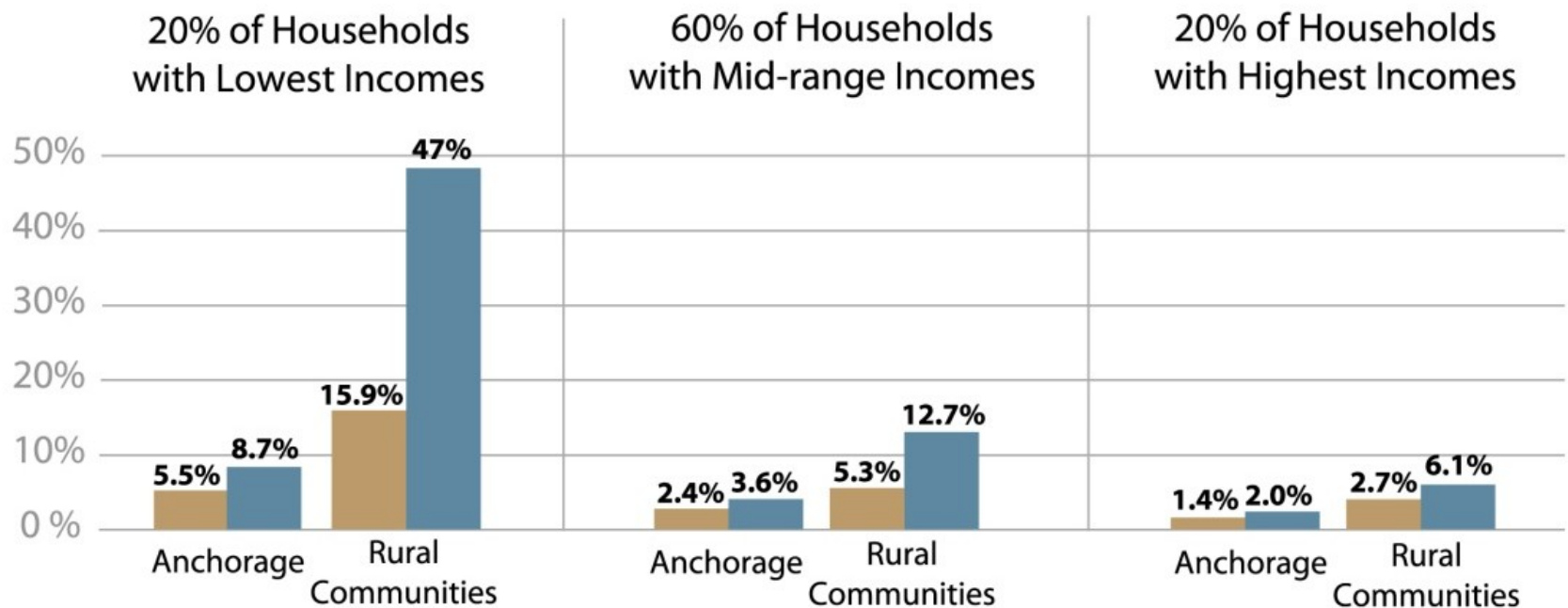


Rural Power System Upgrades (RPSU)



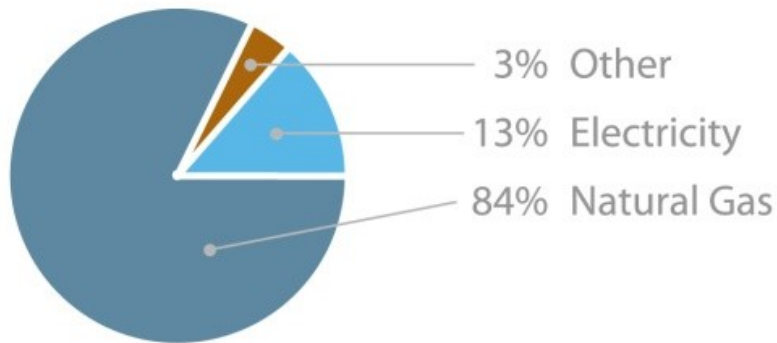
Estimated Median Share of Income Alaska Households Spend for Home Energy Use

■ 2000 ■ 2008

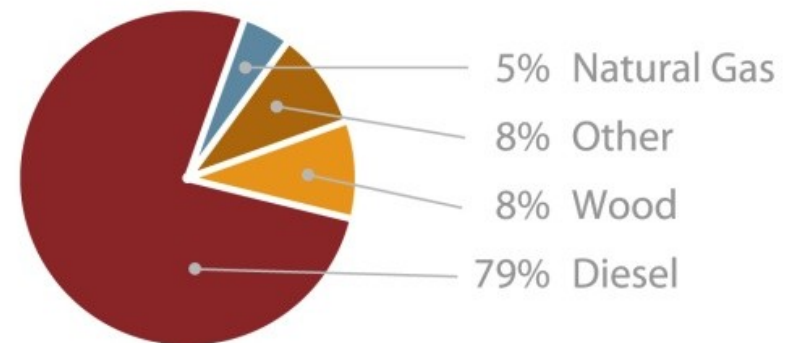


Source: Estimated Household Costs for Home Energy Use, May 2008 a report by ISER

How Alaska Households Heat Their Homes Using Various Energy Sources



Anchorage



Rural Communities

Source: Estimated Household Costs for Home Energy Use, May 2008 a report by ISER

Alternative and Renewable Energy



Co-funded wind-diesel power systems in Selawik, Kasigluk, Toksook Bay, Gambell, Savoonga, Chevak, and Hooper Bay.

Emerging Technologies

2009 Projects

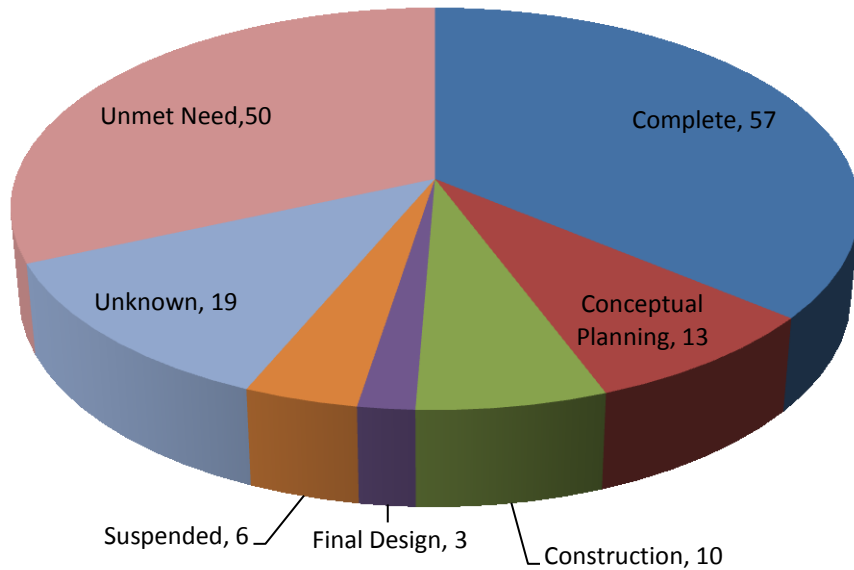
- Seawater Heat Pump Demonstration Project
- Psychrophiles for Generating Heating Gas
- Feasibility of Solar Hot Water Systems
- Flow Battery Energy Storage Systems
- Wales Diesel-Off High Penetration Wind System
- Nenana Hydrokinetic Turbine
- Commercial Scale Wood Pellet Fired Boiler
- Organic Rankine Cycle Heat Recovery System
- High Penetration Hybrid Power System

Partnering with State of Alaska to fund the Emerging Energy Technology Fund at \$4.8 million.

Project Process

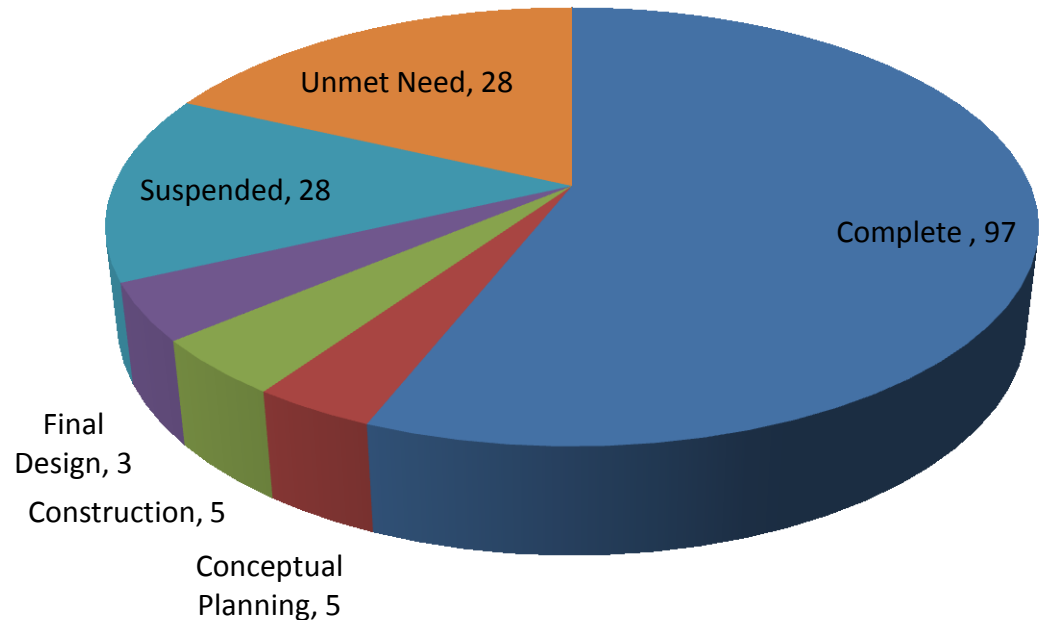
- Developed a Universe of Need database for bulk fuel and RPSU programs
- Program partners: Alaska Energy Authority and Alaska Village Electric Cooperative
- Renewable energy and emerging energy technology projects selected through solicitation process.

Universe of Need



RPSU Universe

Bulk Fuel Universe



What Makes a Project Successful?

- Sustainability – able to provide for long term operation and maintenance of facility
- Community and regional support – local involvement increases sustainability
- Right-sizing
- Training



Denali Commission Federal Fiscal Year 2011 Work Plan



Public Comment Needed
Visit our website:
www.denali.gov

We welcome your input.